

**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK**

LRI INVEST S.A., individually and on behalf
of all others similarly situated,

Plaintiff,

v.

CBOE EXCHANGE, INC., CBOE GLOBAL
MARKETS, INC., CBOE FUTURES
EXCHANGE, LLC, and JOHN DOES,

Defendants.

Docket No. 1:18-cv-6007

CLASS ACTION COMPLAINT

JURY TRIAL DEMANDED

Plaintiff LRI Invest S.A. (“Plaintiff”) brings this action on behalf of itself and all others similarly situated against Defendants CBOE Exchange, Inc., CBOE Global Markets, Inc., CBOE Futures Exchange, LLC and the John Does (“Defendants”). Plaintiff’s allegations are based upon personal knowledge as to its own acts and upon information and belief as to all other matters alleged herein, including the investigation of counsel from publicly available sources of information.

INTRODUCTION

1. This is an antitrust class action against Defendants CBOE Exchange, Inc., CBOE Global Markets, Inc., CBOE Futures Exchange, LLC and John Does concerning: (i) Volatility Index Futures or Options traded in the United States since January 1, 2009; and (ii) Volatility Index Exchange-traded products since January 1, 2009. The Volatility Index is known under its ticker symbol “VIX”. VIX is a benchmark index created by Defendant CBOE Exchange, Inc., a wholly owned subsidiary of CBOE Global Markets, Inc.

2. Plaintiff alleges that Defendants engaged in manipulative conduct which violates Sections 1 and 2 of the Sherman Act, 15 U.S.C. §§ 1, 2 and the Commodity Exchange Act, 7

U.S.C. § 1 *et seq.* Plaintiff further alleges that this conduct has caused, and continues to cause, injury to investors in VIX-Linked Instruments (as defined below). On behalf of itself and all other members of the proposed class defined below, Plaintiff seeks damages arising from Defendants' misconduct, including treble damages as provided by law, and injunctive relief enjoining the continuation of the alleged manipulation.

3. VIX emerged as an important benchmark financial indicator of market sentiment and volatility. It purports to measure expected thirty-day market volatility based on the real-time pricing of S&P 500 Index option contracts ("SPX Options") listed for trading on the CBOE Options Exchange ("CBOE").

4. VIX is a benchmark that cannot be traded. Pursuant to authority granted to it under the Commodity Exchange Act, 7 U.S.C. § 1 *et seq.*, the CBOE eventually created tradeable instruments linked to the VIX. On March 26, 2004, CBOE launched VIX Futures to be traded exclusively on the CBOE Futures Exchange ("CFE"), and on February 24, 2006 launched VIX Options to be traded exclusively on the CBOE.

5. Billions of dollars in exchange-traded funds and exchange-traded notes linked to the pricing of VIX Futures ("VIX-Linked ETFs & ETNs") have been introduced to the market. VIX-Linked ETFs & ETNs include: (i) VelocityShares Daily Inverse VIX Short-Term ETN ("XIV"); (ii) VelocityShares Daily 2x VIX Short-Term ETN ("TVIX"); (iii) ProShares Short VIX Short-Term Futures ETF ("SVXY"); (iv) ProShares Ultra VIX Short-Term Futures ETF ("UVXY"); and (v) iPath S&P 500 VIX Short-Term Futures ETN ("VXX") (collectively referred to herein as "VIX-Linked Instruments").

6. The price of VIX-Linked Instruments is subject to market manipulation by investors targeting the SPX Option market and the calculation of VIX. Professor John M. Griffin

of the McCombs School of Business at The University of Texas at Austin recently observed in a research paper that high “statistically and economically significant trading volume spikes” in SPX Options occurred during the monthly trading window in which the VIX price used to settle expiring VIX Futures and VIX Options is calculated. As explained by Prof. Griffin, “[t]he most natural explanation for these patterns appears to be attempted manipulation.”¹

7. An anonymous whistleblower also recently submitted a letter, on February 12, 2018, to the Securities and Exchange Commission (“SEC”) and the Commodity Futures Trading Commission (“CFTC”) alleging that a “flaw [in the calculation of VIX] allows trading firms with sophisticated algorithms to move the VIX up or down by simply posting quotes on [SPX Options] and without needing to physically engage in any trading or deploying any capital.”² The letter suggests manipulative activity “has led to multiple billions in profits effectively [being] taken away from institutional and retail investors.”³

8. A February 13, 2018 *Financial Times* article entitled *U.S. Watchdog Probes Possible Manipulation of Volatility Index* reported that the alleged anticompetitive conduct has attracted the attention of the Financial Industry Regulatory Authority (“FINRA”), which is

¹ See generally John M. Griffin & Amin Shams, *Manipulation in the VIX?*, The Review of Financial Studies, Aug. 2, 2017, http://www.jgriffin.info/wp-content/uploads/2017/12/vix_pub.pdf (the “Griffin Paper”).

² Letter from Jason Zuckerman & Matt Stock to James McDonald, Esq., Director of Division of Enforcement, Commodity Futures Trading Commission & Stephanie Akavian, Esq. & Steven Peikin, Esq., Co-Directors, Division of Enforcement, Securities and Exchange Commission (Feb. 12, 2018), <https://assets.bwbx.io/documents/users/ijjWHBFdfxIU/r8LCxXQ4CfqU/v0> (the “Whistleblower Letter”).

³ *Id.*

investigating whether Defendants “influence[d] prices of derivatives based on the [VIX] benchmark.”⁴

9. As a direct and proximate result of the Defendants’ unlawful actions, Plaintiff and members of the class have been injured in their business and property.

THE PARTIES

Plaintiff

10. Plaintiff transacted in thousands of VIX Futures and VIX Options contracts with a total notional value in the hundreds of millions of dollars. As a direct and proximate result of Defendants’ collusive and manipulative conduct, Plaintiff was injured in its business or property. Plaintiff intends to continue purchasing VIX Futures and VIX Options contracts and will continue to be injured unless the unlawful conduct is enjoined.

Defendants

11. Defendant CBOE Exchange, Inc. is a Delaware corporation with its principal place of business at 400 South LaSalle Street, Chicago, IL 60605. CBOE Exchange is a wholly owned subsidiary of CBOE Global Markets, Inc., which is also a Delaware corporation with its principal place of business at 400 South LaSalle Street, Chicago, IL 60605. CBOE Futures Exchange, LLC is a Delaware limited liability company with its principal place of business at 400 South LaSalle Street, Chicago, IL 60605.

12. John Doe Defendants are those financial institutions that manipulated VIX Instruments⁵ through the collusive trading in and posting of quotes for SPX Options during the times those SPX Options trades and quotes were used in the settlement calculation of VIX Futures

⁴ Robbin Wigglesworth & Nicole Bullock, *US watchdog probes possible manipulation of volatility index*, The Financial Times, Feb.13, 2018.

⁵ VIX Instruments include VIX Options, VIX Futures, and VIX ETPs.

and VIX Options, and, relatedly, influenced the price of VIX ETPs.⁶ Plaintiff will be able to identify the John Doe Defendants through discovery of trading records in the possession of CBOE that CBOE is required to maintain under the Commodity Exchange Act, including but not limited to, Order Entry Operator identifications, Tag 50 IDs, User Assigned IDs, and Clearing Information.

CO-CONSPIRATORS

13. Defendants engaged in a conspiracy to manipulate the prices of VIX-Linked Instruments by, *inter alia*, manipulating the prices or bid/ask quotes of SPX Options traded on the CBOE and the prices of VIX. Plaintiff does not know the specific identities of all the Defendants or co-conspirators because trading of SPX Options on the CBOE is anonymous. Plaintiff reasonably believes that Defendants are a group of financial institutions and/or traders on the CBOE. As a result, non-party CBOE Global Markets, Inc. (“CBOE Global Markets”—the publisher of VIX and operator of the CBOE and CFE exchanges—is in possession of information capable of specifically identifying Defendants and, thus, Plaintiff will be able to identify Defendants through discovery. Plaintiff will request leave to amend this complaint upon learning the identity of these additional Defendants.

JURISDICTION AND VENUE

14. The Court has jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1337(a), and Section 16 of the Clayton Act, 15 U.S.C. § 26, to award equitable and injunctive relief for violations of

⁶ VIX ETPs include: iPath Inverse S&P 500 VIX Short-Term Futures ETN II (ticker symbol IVOP); ProShares Short VIX Short-Term Futures ETF (SVXY); VelocityShares Daily 2X VIX Short-Term ETN (TVIX); ProShares Ultra VIX Short-Term Futures ETF (UVXY); VelocityShares VIX Short-Term ETN (VIIX); ProShares VIX Short-Term Futures ETF (VIXY); iPath S&P 500 VIX Short-Term Futures ETN (VXX); and iPath S&P 500 Dynamic VIX ETN (XVZ).

Section 1 of the Sherman Act, 15 U.S.C. § 1. The Court also has jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1337(a), to award damages for violation of Section 1 of the Sherman Act, 15 U.S.C. § 1 and the Commodity Exchange Act.

15. Venue is proper in this District pursuant to Sections 4(a) and 12 of the Clayton Act, 15 U.S.C. §§ 15(a) and 22, and 28 U.S.C. § 1391(b),(c), and (d) because Defendants are believed to have resided, transacted business, were found, or had agents in this District, a substantial part of the events giving rise to the claims occurred within this District, and a substantial portion of the affected interstate trade and commerce discussed herein has been carried out in this District.

16. This Court has personal jurisdiction over each Defendant, because each Defendant is believed to have transacted business throughout the United States, including in this District; had substantial contacts with the United States, including in this District; and/or committed overt acts in furtherance of their illegal scheme and conspiracy in the United States, including the manipulation of the prices of VIX-Linked Instruments traded in this District on the NASDAQ and the New York Stock Exchange (“NYSE”). In addition, Defendants’ conspiracy was directed at, and had the intended effect of, causing injury to persons residing in, located in, or doing business in the United States, including in this District, and Plaintiff’s claims arise out of Defendants’ conduct.

17. The activities of Defendants were within the flow of, were intended to, and did have a substantial effect on the interstate commerce of the United States.

FACTUAL ALLEGATIONS

I. BACKGROUND ALLEGATIONS

A. VIX Futures and VIX Options

18. VIX is a benchmark index that measures the 30-day expected volatility of the S&P 500 Index for large cap U.S. stocks. Introduced in 1993, VIX is calculated and published by CBOE

every fifteen seconds during CBOE's regular trading hours (8:30 a.m. to 3:15 p.m. Central Time) and extended trading hours (2:00 a.m. to 8:15 a.m. Central Time), based on the prices of certain SPX Options traded during those time periods. VIX is often referred to as the "fear gauge" because it is a real-time estimate of market volatility based on the midpoint of various SPX Option bid/ask quotes.

19. On its website, the CBOE explains the relation between SPX Options and the VIX as follows:

The VIX Index is an up-to-the-minute market estimate of implied (expected) volatility that is calculated by using the midpoint of real-time S&P 500® Index (SPX) option bid/ask quotes. More specifically, the VIX Index is intended to provide an instantaneous measure of how much the market thinks the S&P 500 Index will fluctuate in the 30 days from the time of each tick of the VIX Index.⁷

20. Investors cannot directly invest in VIX. They can, however, invest in VIX Futures, VIX Options, and/or Exchange Traded Products. Futures and options are types of contracts that CBOE is authorized to create and offer as a board of trade designated as a contract market under the Commodity Exchange Act. CBOE can only list contracts "that ***are not*** readily susceptible to manipulation." 7 U.S.C. § 7(d)(3) (emphasis added).

21. CBOE Global Markets has designed several derivative investments linked to VIX, including VIX Futures and VIX Options that trade on the CFE and CBOE, which enable investors to transact in investment instruments tethered to market volatility. Financial institutions have issued various exchange-traded funds and exchange-traded notes linked to the pricing of VIX Futures. These VIX-Linked ETFs & ETNs allow investors to take long and short (or inverse) positions based on the pricing of short-term or medium-term VIX Futures. Trading activity in

⁷ <http://www.cboe.com/products/vix-index-volatility/vix-options-and-futures/vix-index/vix-faqs> (last visited June 27, 2018).

these investments has substantially increased in recent years, with billions of dollars in VIX-Linked ETFs & ETNs changing hands daily.

22. The CBOE launched VIX Futures for trading on the CFE on March 26, 2004 and VIX Options were launched for trading on the CBOE on February 24, 2006.

23. VIX Futures are a type of futures known as financial future that “usually take the form of a contract that depends on the value of an index at some future date.” *Bd. of Trade of City of Chi. v. S.E.C.*, 187 F.3d 713, 715 (7th Cir. 1999).

24. VIX call options gives the holder the right, but not the obligation, to buy a particular VIX Futures Contract at a specified price, known as the “strike price,” at some predetermined date in the future. The option to purchase the contract is said to “expire” when the future date in question comes to pass. An investor typically buys a VIX call option when he expects the price of the corresponding VIX Future to rise above the call’s strike price.

25. A VIX Exchange-Traded Product (“ETP”) is an instrument that tracks VIX futures, but which trades on an exchange like any other corporate stock. ETPs are derivatively priced and trade intra-day on a national securities exchange like a security. ETPs are “hybrid instruments” under the Commodity Exchange Act (7 U.S.C. § 1a(29)). Their value is derived from other investment instruments, and they are benchmarked to stocks, commodities, or indices.

B. VIX Calculation

26. The data used for VIX calculation are trades of near- and next-term put and call SPX Options with more than 23 days and less than 37 days to expiration; if there is no traded price for a given SPX Option, the average of the bid and ask price of near- and next-term put and call options with more than 23 days and less than 37 days to expiration is used instead. These include SPX options with “standard” third Friday expiration dates and “weekly” SPX options that expire every Friday, except the third Friday of each month.

27. The SPX options used to calculate VIX “roll” to new contract maturities in order to maintain a 30-day expectation of volatility measured by the index. The VIX index is typically calculated using SPX options expiring 24 days later (i.e., “near-term”) and 31 days later (i.e., “next-term”). SPX options that expire in 30 calendar days become the “near-term” options and SPX options that expire in 37 calendar days would become the “next-term” options, thereby maintaining the “more than 23 days and less than 37 days to expiration” window.

28. The CBOE’s standard formula used to calculate both the VIX and the Special Opening Quotation or SOQ (further described below) include: (1) forward SPX level “F”; (2) time to expiration “T”; (3) risk-free interest rate “R”; (4) “ K_i ” representing the strike price for any given out-of-the-money SPX option “i”; (5) the price of that selected option “ $Q(K_i)$ ”; and (6) the average distance between strike prices immediately above and below the forward index level, or “ ΔK_i .⁸

C. VIX Futures and Options Settlement

29. VIXs Futures and Options settlements occur through a modified calculation known as the SOQ. The SOQ is calculated using the auction clearing prices of SPX options. The settlement price determined by the SOQ utilizes a formula comparable to the spot VIX benchmark. The SOQ is highly susceptible to manipulation because it occurs during a fixed, short window during non-trading hours. To be sure, former Securities and Exchange Chairman Harvey Pitt has been quoted as saying “it’s quite clear that [VIX] options can be manipulated. And when there were complaints about possible manipulation, the CBOE, as the marketplace, should have sprung into action.”⁸

⁸ Mark DeCambre, *Ex-SEC Chairman says “it’s quite clear” Wall Street’s “fear gauge” can be manipulated*, MarketWatch (Feb. 16, 2018), <https://www.marketwatch.com/story/ex-sec-chairman-says-its-quite-clear-wall-streets-fear-gauge-can-be-manipulated-2018-02-16> (last visited June 27, 2018).

D. The CBOE's Role in VIX

30. The CBOE was responsible for establishing the formula used to calculate VIX as well as the modified SOQ calculation process to determine the settlement price of VIX Futures and Options. The SPX Options that influence VIX, VIX Futures, and VIX Options are traded on the CBOE Options Exchange and/or CFE. They were established by CBOE pursuant to the authority granted to it under the Commodity Exchange Act. VIX ETPs were dependent on CBOE's selection process for determining and calculating the VIX and the modified SOQ formula for settlement prices and VIX Futures and Options.

31. The CBOE receives a fee for every transaction involving VIX Futures and Options contracts.⁹

32. The CBOE determines which firms are afforded market-making privileges in SPX Options and determines the eligibility requirements to be a market maker.

33. The CBOE profited from fees as its revenues from transaction fees increased fourfold from January 1, 2009 to present, including \$1.56 billion in 2017.

E. VIX-Linked Instruments Are Susceptible to Market Manipulation

34. The method by which VIX is calculated is highly vulnerable to market manipulation. CBOE-authorized market-makers can manipulate VIX by obtaining access granted to them by CBOE and colluding amongst themselves to affect the VIX Index calculation, resulting in the VIX settlement occurring at an artificial price. A member of Goldman Sachs that assisted in the development of the VIX has been quoted as follows: "trying to manipulate the VIX is not conceptually different from trying to manipulate any other index" that is dependent on underlying

⁹ See Cboe Exchange, Inc., Fees Schedule – May 1, 2018, <http://www.cboe.com/publish/feeschedule/CBOEFeeSchedule.pdf> (last visited June 27, 2018).

financial contracts.¹⁰ Market makers could collude and prearrange trades in order to manipulate the VIX settlement. Without collusion from the major players, the VIX could not be manipulated downward with any significant degree of frequency or to any substantial effect.

35. A former banker at Goldman Sachs and former mergers and acquisitions lawyer at Wachtell, Lipton, Rosen & Katz has articulated why it is a flawed process subject to manipulation as follows:

if you are a trader who owns a lot of the market in VIX futures, you could push around a large dollar value of futures by trading a small dollar value in options. This is particularly true because the S&P option volume is divided among many strikes, and the illiquid deep out-of-the-money S&P 500 options have a big influence on the VIX: You can move the price of those options a lot with relatively small trades, and those price changes have a disproportionate effect on the VIX.¹¹

36. In May 2017, Professor John Griffin of the McCombs School of Business at The University of Texas Austin published the Griffin Paper.

37. The key findings in the Griffin paper include the following: (1) at the exact time of the monthly VIX settlement, highly statistically significant trading volume spikes occur in underlying SPX options; (2) the spikes occur only in out-of-the-money SPX options—those utilized for the VIX settlement calculation—and more so for those with greater influence on the calculation; (3) there is no spike in volume for the similar S&P 100 Index or in S&P 500 Exchange Traded Fund options, which are not connected to the VIX; and (4) traders manipulated the settlement by optimally spreading their trades across the SPX option strikes and increasing the number of trades in deep out-of-the-money put options consistent with the VIX formula, despite

¹⁰ Elliot Blair Smith, *How S&P 500 options may be used to manipulate VIX “fear gauge”*, MarketWatch (June 19, 2017), <https://www.marketwatch.com/story/how-sp-500-options-may-be-used-to-manipulate-vix-fear-gauge-2017-06-19> (last visited June 27, 2018).

¹¹ Matt Levine, *VIX Trading, Hoaxes and Blockchain*, Bloomberg (May 24, 2017), <https://www.bloomberg.com/view/articles/2017-05-24/vix-trading-hoaxes-and-blockchain> (last visited June 27, 2018).

such options rarely being traded otherwise. Professor Griffin's research suggested that the relationship between VIX and VIX-Linked Instruments presents an opportunity for manipulators to move the prices of certain SPX Options, which determine the price of VIX, in order to influence the prices of VIX-Linked Instruments. Specifically, the Griffin Paper concludes that "a manipulator can push the prices of illiquid SPX options, but reap the payoffs in the liquid VIX derivatives market" and "that the aggregate evidence aligns itself with what one would expect to see in the case of market manipulation . . ."¹²

38. The steps outlined in the Griffin Paper for a trader to manipulate the VIX settlement are as follows: (1) open long positions in the VIX derivatives prior to settlement; (2) submit aggressive buy or sell orders in the SPX options during the settlement auction, thereby causing the auction-clearing prices of SPX options, and by extension, the VIX settlement price to rise or fall; and (3) obtain the higher or lower price desired for the VIX Futures or Options when they settle. Traders colluding with one another can manipulate the VIX either up or down without the risk that counteracting market movements will offset or negate their gains.

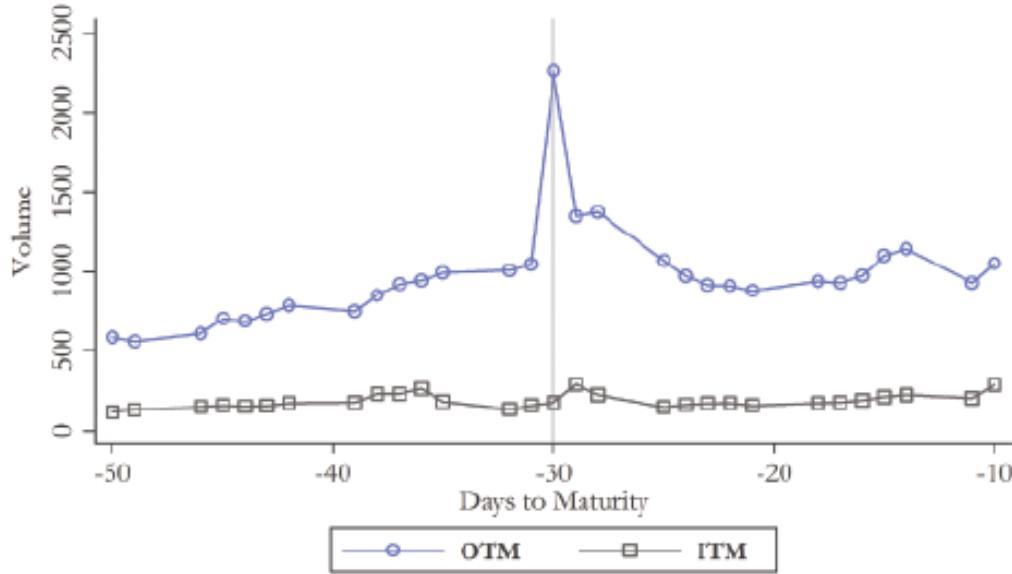
39. As explained by Prof. Griffin, "if traders sought to manipulate the VIX [S]ettlement [Price], they would want to move the prices by . . . increasing the number of trades in the deep OTM [SPX] put options consistent with the VIX formula."¹³

40. This trading pattern is borne out by data analyzed in the Griffin Paper demonstrating that "at the exact time of monthly VIX settlement [for VIX Futures and VIX Options], highly statistically and economically significant trading volume spikes occur in the

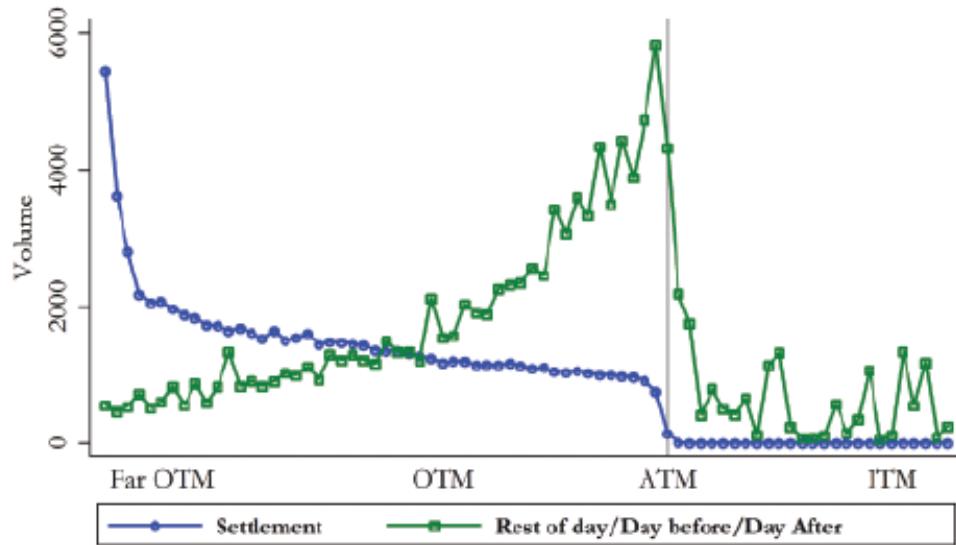
¹² Griffin Paper at 35, 40.

¹³ *Id.* at 3.

underlying SPX options” and that the “spikes occur only in the OTM SPX options included in the VIX [S]ettlement [Price] calculation and not in the excluded in-the-money (ITM) SPX options”:¹⁴



41. The spike in OTM SPX Options during the settlement window occurs principally in rarely traded SPX Options that are priced the furthest OTM, and thus, have the greatest manipulative impact on the VIX Settlement Price:¹⁵



¹⁴ *Id.* at 3, 11.

¹⁵ *Id.* at 14.

42. Professor Griffin also found that “there is no spike in volume for the similar S&P 100 Index (OEX) or SPDR S&P 500 ETF (SPY) options [that are] unconnected to volatility index derivatives,” and thus, do not present a strong opportunity for market manipulation.¹⁶ The absence of a similar trading pattern in these related options—which are impacted by similar fundamentals—further suggests that the unusual trading pattern in SPX Options is evidence of market manipulation.¹⁷

43. Professor Griffin concludes that “[t]he most natural explanation for these patterns appears to be attempted manipulation” and that although he and his team “thoroughly investigated alternative explanations of coordinated liquidity and two forms of hedging but f[oun]d that these explanations do not fit the data as well as the manipulation hypothesis.”¹⁸

44. In a February 12, 2018 letter to the SEC and CFTC, “an anonymous whistleblower who has held senior positions at some of the largest investment firms in the world” has alleged that “a pervasive flaw in the [calculation of VIX] allows trading firms with sophisticated algorithms to move the VIX up or down by simply posting quotes on [SPX Options] and without needing to physically engage in any trading or deploying any capital.” This conduct, according to the Whistleblower Letter, “has led to multiple billions in profits effectively [being] taken away from institutional and retail investors.”¹⁹

45. As explained in the Whistleblower Letter, “VIX is highly subject to manipulation by market participants with the ability to rapidly post quotes in the market for [SPX Options]” and

¹⁶ *Id.* at 3; *see also id.* at 10 – 12.

¹⁷ *Id.* at 5, 39.

¹⁸ *Id.*

¹⁹ Whistleblower Letter at 1 – 2.

“because the VIX is a theoretical index, which does not rely on trading activity but mid-prices, [it] can be moved up or down by posting quotes without any physical trading taking place.”²⁰

46. Among other things, the Whistleblower Letter suggests that the collapse of certain inverse VIX-Linked ETFs & ETNs on February 5, 2018, including XIV and UVXY, was partially the result of market manipulation that helped double the price of VIX and, as a result, doubled the price of VIX Futures.²¹ The unprecedented movement of VIX and First VIX Futures prices on February 5, 2018, are set forth in the chart below:²²



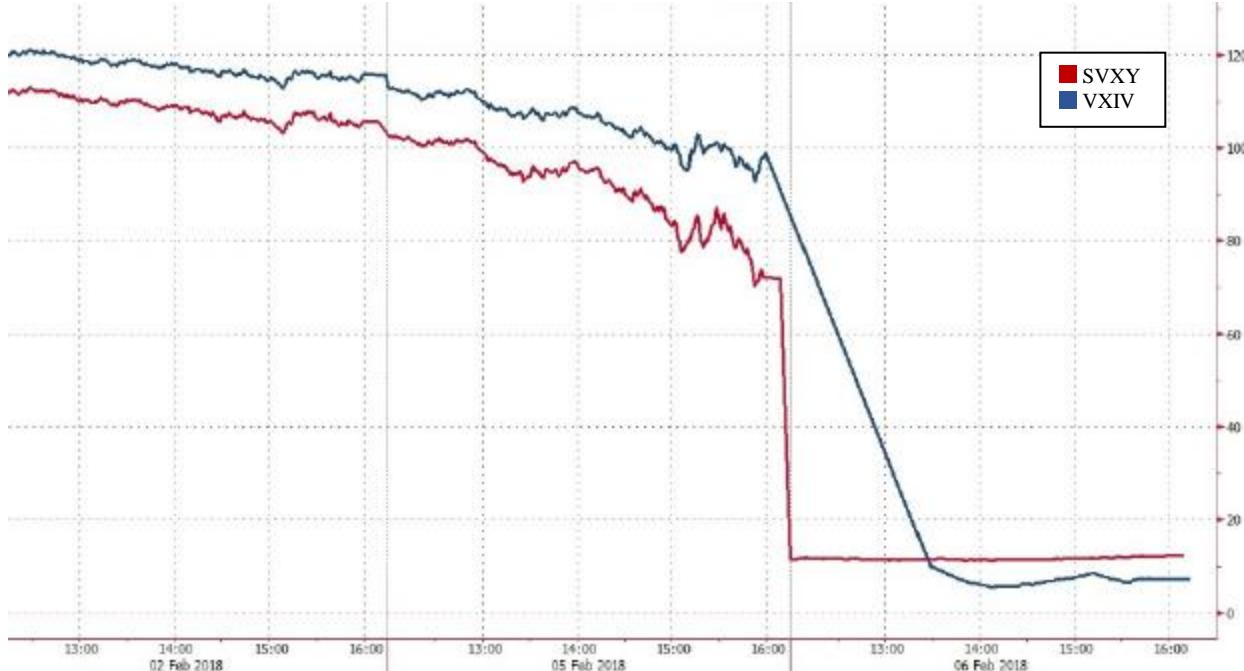
47. Ultimately, the rapidly escalating price of VIX Futures on February 5, 2018, caused the prices of XIV and SVXY to crater and, in XIV’s case, triggered a liquidation event that has left XIV investors holding the bag for hundreds of millions of dollars in losses.²³

²⁰ *Id.* at 2.

²¹ See *id.* at 2 – 3 (explaining that “the VIX index led the way higher, bringing with it the price of VIX futures” and “[u]ltimately the VIX reached 50 and futures surged above 30 as the [VIX-Linked ETFs & ETNs] settled” around the close of trading at 4:15 p.m. Eastern Time).

²² Data from Bloomberg.

²³ Data from Bloomberg; see also Credit Suisse AG, *Credit Suisse AG Announces Event Acceleration of its XIV ETNs*, Feb. 6, 2018, <https://www.credit-suisse.com/corporate/en/articles/media-releases/credit-suisse-announces-event-acceleration-xiv-etn-201802.html> (“Since the intraday indicative value of XIV on February 5, 2018 was equal to or less than 20% of the prior day’s closing indicative value, an acceleration event has occurred. . . . On the acceleration date,



II. DEFENDANTS CONSPIRED TO MANIPULATE THE PRICES OF VIX-LINKED INSTRUMENTS

48. Defendants and other unknown persons, firms, and/or corporations that are, upon information and belief, horizontal competitors in the market for VIX-Linked Instruments in the United States conspired. Defendants and others have participated as co-conspirators and have performed acts in furtherance of the conspiracy alleged herein.

49. Upon information and belief, Defendants and others combined, conspired, and/or colluded to manipulate the prices of VIX-Linked Instruments.

50. Defendants' and others' anticompetitive combination, conspiracy, and/or agreement is a *per se* violation of Section 1 of the Sherman Act, 15 U.S.C. § 1. Defendants'

investors will receive a cash payment per ETN in an amount equal to the closing indicative value of XIV on the accelerated valuation date. The last day of trading for XIV is expected to be February 20, 2018.”).

collusion resulted in substantial anticompetitive effects in the market for VIX-Linked Instruments in the United States.

51. Defendants intended to restrain trade and actually restrained trade in violation of Section 1 of the Sherman Act. Defendants shared a conscious commitment to the common scheme designed to achieve the unlawful objective of manipulating the prices of VIX-Linked Instruments.

52. There are no legitimate business justifications for, or procompetitive benefits of, Defendants' unreasonable restraint of trade.

53. No one Defendant was capable of unilaterally manipulating the prices of VIX-Linked Instruments without fearing that ordinary market forces would counteract its efforts or that the other Defendants would manipulate the prices of VIX-Linked Instruments in an opposite direction—thereby causing harm to the Defendant's investment positions.

54. Defendants are jointly and severally liable for the acts of their co-conspirators.

III. ANTITRUST INJURY TO PLAINTIFF AND THE CLASS

55. Defendants and others injured Plaintiff and Class members by manipulating the prices of VIX-Linked Instruments. The pricing of VIX Instruments is based on fundamental market forces of supply and demand. Specifically, the prices of VIX Instruments are inherently based on the VIX and the VIX SOQ. Defendants understood that they could directly or indirectly manipulate the prices of VIX Instruments through the manipulation of the VIX.

56. Defendants' contract, combination, or conspiracy to manipulate the prices of VIX-Linked Instruments injured and continues to injure competition in the market for VIX-Linked Instruments in the United States.

57. Absent Defendants' collusion, those transacting in VIX-Linked Instruments would have transacted at competitive prices and reaped the benefits of free and unrestrained competition

resulting in lower prices. Defendants' collusion has, however, had the effect of causing VIX-Linked Instruments to trade at artificial prices.

58. Defendant's unlawful conduct deprives Plaintiff and Class members who transact in VIX-Linked Instruments of a competitive marketplace and exposes them to artificial volatility.

59. As a direct, intended, foreseeable, and proximate result of Defendants' unlawful conspiracy and acts in furtherance of their conspiracy, Plaintiff and Class members have been injured in their business and property, in violation of the federal antitrust laws. The alleged conduct also violates the Commodity Exchange Act.

60. Plaintiff and the Class members are suitable plaintiffs for pursuing antitrust violations by Defendants, insofar as they transacted in VIX Instruments during the Class Period, and thus were harmed by Defendants' anticompetitive conduct.

61. The injury to Plaintiff and Class members is the type the antitrust laws were designed to prevent and directly flows from Defendants' unlawful anticompetitive conduct.

IV. EFFECT ON INTERSTATE COMMERCE

62. VIX-Linked Instruments are traded in interstate commerce. Billions of dollars of transactions in VIX-Linked Instruments are annually traded in interstate commerce in the United States.

63. Defendants' manipulation of the pricing of VIX-Linked Instruments had a direct, substantial, and reasonably foreseeable impact on interstate commerce in the United States.

64. Defendants intentionally targeted their unlawful conduct to affect commerce, including interstate commerce within the United States, by agreeing, combining, or conspiring to manipulate the prices of VIX-Linked Instruments.

65. Defendants' unlawful conduct has a direct and adverse impact on competition in the United States. Absent Defendant's agreement, combination, or conspiracy to manipulate the

prices of VIX-Linked Instruments, the pricing of VIX-Linked Instruments would be determined by a competitive, efficient market resulting in non-artificial prices for Plaintiff and Class members.

TOLLING OF THE STATUTE OF LIMITATIONS

66. Any applicable statute of limitations has been tolled by Defendants' knowing and active concealment of their manipulation of the prices of VIX-Linked Instruments. Through no fault or lack of diligence, Plaintiff and Class members were deceived regarding Defendants' manipulation of the prices of VIX-Linked Instruments and could not reasonably discover the manipulation.

67. As alleged herein, Defendants' manipulation of the prices of VIX-Linked Instruments was material to Plaintiff and Class members. Within the time period of any applicable statutes of limitations, Plaintiff and Class members could not have discovered through the exercise of reasonable diligence that Defendants were manipulating the prices of VIX-Linked Instruments, which Defendants fraudulently concealed.

68. Plaintiff and Class members did not discover and did not know of any facts that would have caused a reasonable person to suspect that Defendants were manipulating the prices of VIX-Linked Instruments.

69. Defendants knowingly, actively, and affirmatively concealed the facts alleged herein, including their manipulation of the prices of VIX-Linked Instruments. Plaintiff and Class members reasonably relied on Defendants' knowing, active, and affirmative concealment.

70. For these reasons, all applicable statutes of limitation have been tolled based on the discovery rule and Defendants' fraudulent concealment and Defendants are estopped from relying on any statutes of limitations in defense of this action.

CLASS ACTION ALLEGATIONS

71. Plaintiff brings this proposed action pursuant to Federal Rules of Civil Procedure (“Rules”) 23(a) and 23(b)(1), (b)(2), and/or (b)(3) on behalf of itself and all members of the proposed Classes defined as follows:

VIX FUTURES AND OPTIONS CLASS

All persons or entities that transacted in VIX-Futures or Options in the United States on or after January 1, 2009 until the conclusion of the anticompetitive conduct.

VIX EXCHANGE-TRADED PRODUCTS CLASS

All persons or entities who traded VIX Exchange-Traded Products on an exchange in the United States on or after January 1, 2009 until the conclusion of the anticompetitive conduct.

72. Excluded from the Class are Defendants and their parents, subsidiaries and corporate affiliates, officers, directors, employees, assigns, successors, and co-conspirators, the court, court staff, Defendants’ counsel, and all respective immediate family members of the excluded entities described above. Plaintiff reserves the right to revise the definition of the Class based upon subsequently discovered information and reserves the right to establish Sub-Classes where appropriate.

73. The Class is so numerous that individual joinder of all potential members is impracticable. Plaintiff believes that there are at least thousands of proposed members of the Class throughout the United States.

74. Common questions of law and fact exist as to all members of the Class and predominate over any issues solely affecting individual members of the Class. The common and predominating questions of law and fact include, but are not limited to:

- a) Whether Defendants unreasonably restrained trade in violation of Section 1 of the Sherman Act, 15 U.S.C. § 1;

- b) Whether Defendants' conduct is a *per se* violation of Section 1 of the Sherman Act;
- c) Whether Defendants engaged in a contract, combination or conspiracy to manipulate the prices of VIX-Linked Instruments;
- d) The identity of the participants in the conspiracy;
- e) The duration of the conspiracy;
- f) The nature and character of the acts performed by Defendants in furtherance of the conspiracy;
- g) Whether the conduct of Defendants, as alleged herein, caused injury to the business or property of Plaintiff and Class members;
- h) Whether Defendants' conduct constitutes manipulation under the Commodity Exchange Act, 7 U.S.C. § 1 *et seq.*;
- i) Whether injunctive and/or equitable relief should be awarded; and
- j) Whether actual damages, costs, restitution, disgorgement, statutory, and/or treble damages should be awarded.

75. Plaintiff's claims are typical of the claims of the Class Plaintiff seeks to represent. As alleged herein, Plaintiff and the Class sustained damages arising out of the same illegal actions and conduct by Defendants.

76. Plaintiff is willing and prepared to serve the Class in a representative capacity with all of the obligations and duties material thereto. Plaintiff will fairly and adequately protect the interests of the Class and has no interests adverse to or in conflict with the interests of the other members of the Class.

77. Plaintiff's interests are co-extensive with and are not antagonistic to those of absent Class members. Plaintiff will undertake to represent and protect the interests of absent Class members and will vigorously prosecute this action.

78. Plaintiff has engaged the services of the undersigned counsel. Counsel is experienced in complex litigation and antitrust class actions, will adequately prosecute this action, and will assert and protect the rights of, and otherwise represent, Plaintiff and absent Class members.

79. A class action is superior to all other available methods for the fair and efficient adjudication of this controversy. Plaintiff knows of no difficulty to be encountered in the management of this litigation that would preclude its maintenance as a class action.

80. Class action status is warranted under Rule 23(b)(3) because questions of law or fact common to Class members predominate over any questions affecting only individual Class members, and a class action is superior to other available methods for the fair and efficient adjudication of this controversy.

81. The Class may also be certified under Rule 23(b)(1)(A) and (B) because the prosecution of separate actions by individual Class members would create a risk of inconsistent or varying adjudications with respect to individual Class members, which would establish incompatible standards of conduct for Defendants, would be dispositive of the interests of nonparties to the individual adjudications, and would substantially impair the ability of such nonparties to protect their interests.

82. The Class may also be certified under Rule 23(b)(2) because Defendants have acted on grounds generally applicable to the Classes, thereby making it appropriate to award final injunctive relief or corresponding declaratory relief with respect to the Classes.

83. The interest of Class members in individually controlling the prosecution of separate actions is theoretical and not practical. The Class has a high degree of similarity and is cohesive, and Plaintiff anticipates no difficulty in the management of this matter as a class action.

COUNT I
Violation of Section 1 of the Sherman Act
(Injunctive Relief)

84. Plaintiff incorporates by reference and re-alleges each preceding paragraph as though fully set forth herein.

85. Beginning at least as early as January 1, 2009, and continuing through the present, the exact dates being unknown to Plaintiff, Defendants entered into and engaged in a conspiracy in unreasonable restraint of trade in violation of Section 1 of the Sherman Act, 15 U.S.C. § 1.

86. As alleged herein, Defendants combined, conspired, and agreed to manipulate the prices of VIX-Linked Instruments. This contract combination or conspiracy unreasonably restrained trade in violation of the federal antitrust laws.

87. The anticompetitive contract, combination, or conspiracy alleged herein is a *per se* violation of Section 1 of the Sherman Act, 15 U.S.C. § 1 (“Section 1”). The anticompetitive contract, combination, or conspiracy alleged herein resulted in substantial anticompetitive effects in the market for VIX-Linked Instruments in the United States in violation of Section 1. 15 U.S.C. § 1.

88. Defendants intended to restrain trade and actually restrained trade in violation of Section 1. 15 U.S.C. § 1. Defendants shared a conscious commitment to the common scheme designed to achieve the unlawful objective of manipulating the prices of VIX-Linked Instruments.

89. The anticompetitive contract, combination, or conspiracy alleged herein unreasonably restrained trade, and there is no legitimate business justification for, or procompetitive benefits of, Defendants’ unreasonable restraint of trade. Any alleged

procompetitive benefit or business justification is pretextual and/or could have been achieved through less restrictive alternative means.

90. The anticompetitive contract, combination or conspiracy alleged herein occurred within the flow of and substantially affected interstate commerce.

91. As a direct and proximate result of Defendants' anticompetitive scheme and concrete acts in furtherance of that scheme, Plaintiff and members of the Class have been injured in their business and property by reason of Defendants' violation of Section 1.

92. Plaintiff and Class members seek equitable and injunctive relief, including disgorgement of profits, pursuant to Section 16 of the Clayton Act, 15 U.S.C. § 26, and other applicable law, to correct for the anticompetitive market effects caused by Defendants' unlawful conduct, and other relief to ensure that the same or similar anticompetitive conduct does not reoccur in the future.

COUNT II
Violation of Section 1 of the Sherman Act

93. Plaintiff incorporates by reference and re-alleges each preceding paragraph as though fully set forth herein.

94. Beginning at least as early as January 1, 2009, and continuing through the present, the exact dates being unknown to Plaintiff, Defendants entered into and engaged in a conspiracy in unreasonable restraint of trade in violation of Section 1.

95. As alleged herein, Defendants combined, conspired, and agreed to manipulate the prices of VIX-Linked Instruments. This contract, combination or conspiracy unreasonably restrained trade in violation of the federal antitrust laws.

96. The anticompetitive contract, combination, or conspiracy alleged herein is a *per se* violation of Section 1. The anticompetitive contract, combination or conspiracy alleged herein

resulted in substantial anticompetitive effects in the market for VIX-Linked Instruments in the United States in violation of Section 1. 15 U.S.C. § 1.

97. Defendants intended to restrain trade and actually restrained trade in violation of Section 1. 15 U.S.C. § 1. Defendants shared a conscious commitment to the common scheme designed to achieve the unlawful objective of manipulating the prices of VIX-Linked Instruments.

98. The anticompetitive contract, combination, or conspiracy alleged herein unreasonably restrained trade, and there is no legitimate business justification for, or procompetitive benefits of, Defendants' unreasonable restraint of trade. Any alleged procompetitive benefit or business justification is pretextual and/or could have been achieved through less restrictive alternative means.

99. The anticompetitive contract, combination or conspiracy alleged herein occurred within the flow of and substantially affected interstate commerce.

100. As a direct and proximate result of Defendants' anticompetitive conduct and acts in furtherance of the scheme, Plaintiff and members of the Class have been injured in their business and/or property by reason of Defendants' violation of Section 1 within the meaning of Section 4 of the Clayton Antitrust Act, 15 U.S.C. § 15.

101. Plaintiff's and the Class's injuries are of the type the antitrust laws were designed to prevent and are a direct result of Defendants' unlawful anticompetitive conduct.

102. Plaintiff and the Class are entitled to treble damages for the violations of the Sherman Act alleged herein.

COUNT III
Violation of Section 2 of the Sherman Act. 15 U.S.C. § 2
(Declaratory Judgment & Injunctive Relief)

103. Plaintiff repeats and incorporates by reference each of the foregoing allegations of this Complaint.

104. During the Class Period and as alleged above, Defendants, who collectively control the VIX market, manipulated the SPX Options to manipulate the SOQ settlement process for expiring VIX Futures and Options in order to artificially inflate VIX prices in violation of Section 2 of the Sherman Act, 15 U.S.C. § 2.

105. Defendants engaged trades and orders for SPX Options through anticompetitive means and at anticompetitive prices in order to impact, *inter alia*, VIX Options and VIX Futures in directions that benefitted Defendants.

106. Defendants possess monopoly power in the VIX market for VIX Futures and VIX Options and willfully maintained that power through their ability to set the SOQ settlement prices for VIX Options and VIX Futures. Defendants used their control of the market in order to prevent free and unrestrained competition and to control the market for anticompetitive purposes.

107. These actions, *inter alia*, violate 15 U.S.C. § 2, *et seq.* and 15 U.S.C. § 26, *et seq.* in that they constitute an abuse of market power resulting in artificially inflated VIX prices.

108. An actual controversy exists between Plaintiff and members of the Class on the one hand and Defendants on the other concerning Defendants' anticompetitive conduct, which has caused artificially inflated prices for VIX Linked Instruments.

109. Plaintiff and members of the Class are entitled to a declaration of the rights and obligations of the respective parties pursuant to 28 U.S.C. § 2201, *et seq.* These violations are continuing and will continue unless enjoined by this Court.

110. Pursuant to Section 16 of the Clayton Act, 15 U.S.C. § 26, Plaintiff and members of the Class seek the issuance of a declaratory judgment and injunctive relief declaring that Defendants' course of conduct is unlawful as alleged herein and enjoining such conduct.

COUNT IV
Manipulation in Violation of the Commodity Exchange Act

111. Plaintiff repeats and incorporates by reference each of the foregoing allegations of this Complaint.

112. Each Defendant, individually, in concert, and/or as one another's control persons or agents, through their acts alleged herein, specifically intended to and did cause unlawful and artificial prices of VIX Futures and Options contracts in violation of the Commodity Exchange Act, 7 U.S.C. § 1, *et seq.*

113. Defendants' manipulative conduct and trading activity alleged herein constituted a manipulation of the prices of VIX Instruments in violation of Section 4b(a), 4c(a), 9(a) and 22(a) of the Commodity Exchange Act, 7 U.S.C. §§ 6b(a), 6c(a), 13(a)(2), and 25(a). As a direct result of Defendants' unlawful conduct, Plaintiff and members of the Class have suffered actual damages and injury in fact due to artificial prices for VIX Instruments to which they would not have been subject but for the unlawful conduct alleged herein.

114. Plaintiff and members of the Class were further legally injured and suffered injury in fact when they transacted VIX Instruments in an artificial and manipulated market operating under the artificial prices caused by the Defendants. Plaintiff and members of the Class are each entitled to their actual damages for the violations of the Commodity Exchange Act alleged herein.

COUNT V

Aiding and Abetting Manipulation in Violation of the Commodity Exchange Act

115. Plaintiff repeats and incorporates by reference each of the foregoing allegations of this Complaint.

116. John Doe Defendants by, *inter alia*, using VIX features introduced by CBOE and through the collusive posting of quotes and trading of SPX Options, knowingly aided, abetted, counseled, induced, and/or procured the violations of the Commodity Exchange Act by other John Doe Defendants as alleged herein. The John Doe Defendants further coordinated their trading and market activity for the purposes of manipulating VIX Instruments.

117. Each John Doe Defendant did so knowing of the other John Doe Defendants' manipulation of the prices of SPX Options underlying the prices of VIX Instruments. The conduct alleged herein demonstrates that Defendants substantially and willfully intended to assist these manipulations so as to cause prices of VIX Instruments to be artificial, in violation of Section 22(a)(1) of the Commodity Exchange Act.

118. Under Section 13(a) of the Commodity Exchange Act, 7 U.S.C. § 13c(a), Defendants are liable for willfully intending to assist the manipulation.

119. Other persons willfully intended to assist these manipulations to cause VIX Instruments to trade at artificial levels—the agents and unnamed co-conspirators as alleged herein—in violation of § 22(a)(1) of the Commodity Exchange Act, 7 U.S.C. § 25(a)(1).

120. Plaintiff and members of the proposed Class are each entitled to actual damages sustained for the violations of the Commodity Exchange Act alleged herein.

COUNT VI
Manipulation by False Reporting and Fraud and Deceit in Violation
of the Commodity Exchange Act

121. Plaintiff repeats and incorporates by reference each of the foregoing allegations of this Complaint.

122. Under Section 6(c)(1) of the Commodity Exchange Act, as amended, codified at 7 U.S.C. § 9, and Section 22 of the Commodity Exchange Act, as amended, 7 U.S.C. § 25, it is unlawful for any person, directly or indirectly, to use or employ, or attempt to use or employ, in connection with any swap, or a contract of sale of any commodity in interstate commerce, or for future delivery on or subject to the rules of any registered entity, any manipulative or deceptive device or contrivance, in contravention of such rules and regulations as the CFTC shall promulgate.

123. In July 2011, the CFTC promulgated Rule 180.1(a), 17 C.F.R. § 180.1(a) (2011), pursuant to Section (6)(c)(1), which provides, in relevant part:

It shall be unlawful for any person, directly or indirectly, in connection with any swap, or contract of sale of any commodity in interstate commerce, or contract for future delivery on or subject to the rules of any registered entity, to intentionally or recklessly:

- (1) Use or employ, or attempt to use or employ, any manipulative device, scheme, or artifice to defraud;
- (2) Make, or attempt to make, any untrue or misleading statement of a material fact or to omit to state a material fact necessary in order to make the statements made not untrue or misleading;
- (3) Engage, or attempt to engage, in any act, practice, or course of business which operates or would operate as a fraud or deceit upon any person; or
- (4) Deliver or cause to be delivered, or attempt to deliver or cause to be delivered for transmission through mails or interstate commerce, by any means of communication whatsoever, a false or misleading or inaccurate report concerning crop or market information or conditions that affect or tend to affect the price of any commodity in interstate commerce, knowing

or acting in reckless disregard of the fact that such report is false, misleading or inaccurate.

124. Unlawful manipulation under the Commodity Exchange Act, as amended, and Rule 180.1 includes delivering, or causing to be delivered for transmission through the mails or interstate commerce, by any means of communication whatsoever, a false or misleading or inaccurate report concerning market information or conditions that affect or tend to affect the price of any commodity in interstate commerce, knowing, or acting in reckless disregard of the fact that such report is false, misleading, or inaccurate.

125. During the Class Period, Defendants used or employed manipulative or deceptive devices or contrivances, in connection with a contract of sale or purchase of SPX Options and VIX Instruments in interstate commerce. This conduct included the making of untrue, inaccurate, or misleading statements of material facts, or omitting material facts necessary to make the statements made not misleading, such as the posting or bidding on of artificial prices for SPX Options in order to influence the prices of VIX Instruments, and failing to disclose that Defendants entered pre-arranged transactions to move the prices of VIX Instruments in a direction to benefit their own trading books.

126. Defendants' conduct caused injury to Plaintiff and other members of the Class who transacted in an artificial and manipulated market, at manipulated prices, and with artificial price trends, during the Class Period.

127. Plaintiff and other members of the Class are each entitled to damages for the violations of the Commodity Exchange Act alleged herein.

COUNT VII

Failure to Enforce Bylaws, Rules, Regulations, or Resolutions that CBOE Is Required to Enforce in Violation of the Commodity Exchange Act

128. Plaintiff repeats and incorporates by reference each of the foregoing allegations of this Complaint.

129. Pursuant to 7 U.S.C. § 25(b)(1), “[a] registered entity that fails to enforce any bylaw, rule, regulation, or resolution that it is required to enforce by section 7, 7a-1, 7a-2, 7b-3, or 24a of this title . . . [or] a licensed board of trade that fails to enforce any bylaw, rule, regulation, or resolution that it is required to enforce by the Commission . . . shall be liable for actual damages sustained by a person who engaged in any transaction on or subject to the rules of such registered entity to the extent of such person’s actual losses that resulted from such transaction and were caused by such failure to enforce . . . such bylaws, rules, regulations, or resolutions.”

130. CBOE is a registered entity under the terms of 7 U.S.C. § 1a(40).

131. Plaintiff and other members of the Class engaged in transactions of VIX Futures and VIX Options subject to the rules of CBOE.

132. As detailed in the Complaint above, as a registered entity, CBOE knowingly failed to enforce (and/or with reckless disregard of its rules/regulations avoided acquiring such knowledge necessary to enforce) the following mandatory rules that CBOE was required to follow under the Commodity Exchange Act:

- a. 7 U.S.C. § 7(d)(2)(A): “The board of trade shall establish, monitor, and enforce compliance with the rules of the contract market, including . . . (iii) rules prohibiting abusive trade practices on the contract market.”
- b. 7 U.S.C. § 7(d)(2)(B): “The board of trade shall have the capacity to detect, investigate, and apply appropriate sanctions to any person that violates any rule of the contract market.”

- c. 7 U.S.C. § 7(d)(3): “The board of trade shall list on the contract market only contracts that are not readily susceptible to manipulation.”
- d. 7 U.S.C. § 7(d)(4): “The board of trade shall have the capacity and responsibility to prevent manipulation, price distortion, and disruptions of the delivery or cash-settlement process through market surveillance, compliance, and enforcement practices and procedures, including – (A) methods for conducting real-time monitoring of trading; and (B) comprehensive and accurate trade reconstructions.”
- e. 7 U.S.C. § 7(d)(5)(A): “To reduce the potential threat of market manipulation or congestion (especially during trading in the delivery month), the board of trade shall adopt for each contract of the board of trade, as is necessary and appropriate, position limitations or position accountability for speculators.”
- f. 7 U.S.C. § 7(d)(9)(A): “The board of trade shall provide a competitive, open, and efficient market and mechanism for executing transactions that protects the price discovery process of trading in the centralized market of the board of trade.”
- g. 7 U.S.C. § 7(d)(10): “The board of trade shall maintain rules and procedures to provide for the recording and safe storage of all identifying trade information in a manner that enables the contract market to use the information – (A) to assist in the prevention of customer and market abuses; and (B) to provide evidence of any violations of the rules of the contract market.”
- h. 7 U.S.C. § 7(d)(12): “The board of trade shall establish and enforce rules – (A) to protect markets and market participants from abusive practices committed by any party, including abusive practices committed by a party acting as an agent for a participant; and (B) to promote fair and equitable trading on the contract market.”

i. 7 U.S.C. § 7(d)(19): “Unless necessary or appropriate to achieve the purposes of this chapter, the board of trade shall not – (A) adopt any rule or taking [sic] any action that results in any unreasonable restraint of trade; or (B) impose any material anticompetitive burden on trading on the contract market.”

133. CBOE had knowledge and/or with reckless disregard of its rules/regulations avoided acquiring such knowledge that: the SOQ used for settlement of VIX Futures and VIX Options was susceptible to being manipulated and was, in fact, being manipulated; the manipulation of the SOQ was manipulating the value of VIX Futures and VIX Options that CBOE allowed to be traded; this manipulation of the SOQ and VIX Futures and VIX Options constituted abusive trade practices; and nonetheless CBOE did not stop offering those products for trading, nor did it investigate, enforce, or apply appropriate sanctions against individuals or entities engaged in this manipulation and abusive trade practices.

134. CBOE failed to enforce these rules in bad faith. CBOE knew that suspending trading in VIX Futures and VIX Options that were susceptible to manipulation would negatively impact the transaction fees and revenues CBOE realized and enjoyed during the Class Period, and would also negatively impact the value of CBOE’s stock (including shares held by and paid to CBOE officers and directors as part of their compensation). CBOE (including its officers and directors) therefore had a financial incentive to allow the manipulation described above to continue.

135. CBOE’s conduct caused injury to Plaintiff and other members of the Class who transacted via CBOE’s markets in VIX Futures and VIX Options that CBOE knew (or was recklessly indifferent to knowing) were being traded in an artificial and manipulated market, at manipulated prices, and with artificial price trends, during the Class Period.

136. The damages to Plaintiff and other members of the Class were caused by CBOE's failure to enforce bylaws, rules, regulations, or resolutions that it was required to enforce under the Commodity Exchange Act. Plaintiff and other members of the Class are each entitled to damages for the violations of the Commodity Exchange Act, 7 U.S.C. § 1 *et seq.* alleged herein.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff, on behalf of itself and all others similarly situated, respectfully requests that this Court enter judgment against Defendants and in favor of Plaintiff and the Class, and award the following relief:

- A. An order certifying this action as a class action pursuant to Rule 23 of the Federal Rules of Civil Procedure, declaring Plaintiff as the representative of the Class, and Plaintiff's counsel as counsel for the Class;
- B. An order finding Defendants jointly and severally liable for the damages incurred by Plaintiff and the Class;
- C. An order declaring the unlawful conduct alleged herein violates Section 1 of the Sherman Act;
- D. An order declaring the unlawful conduct alleged herein violates the Commodity Exchange Act;
- E. An order enjoining Defendants from continuing their unlawful conduct;
- F. An award of actual damages, costs, restitution, disgorgement, statutory, and/or treble damages under applicable law;
- G. An award of monetary damages in favor of Plaintiff and the Class and against Defendants for their violation of federal antitrust laws, in amount trebled plus interest in accordance with those laws;

- H. An order requiring Defendants to pay both pre- and post-judgment interest on any amounts awarded;
- I. An award of costs, expenses, and attorneys' fees as permitted by law; and
- J. Such other or further relief as the Court may deem appropriate, just, and equitable.

DEMAND FOR JURY TRIAL

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Plaintiff hereby demands a trial by jury on all issues so triable.

Dated: July 2, 2018

Respectfully submitted,

MOTLEY RICE LLC

By: /s/ Michael M. Buchman

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